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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

January 22, 1998

To: Board of Directors (Committee on Legislation--Action)

From: *for* General Manager

Charles McArthur
Mark Beuhler

Submitted by: Mark D. Beuhler
Director of Water Quality

Subject: Legislation on Perchlorate

RECOMMENDATION

It is recommended that your Board support SB 1033 (Sher - Palo Alto), if amended.

EXECUTIVE SUMMARY

State Senator Byron Sher (Palo Alto) recently amended his bill, SB 1033, to require the California Department of Health Services to adopt a primary drinking water standard for perchlorate and provide a report to the Legislature on treatment and occurrence. Consistent with the pending policy principles developed by Metropolitan, staff recommends support of SB 1033 if the bill is amended to require that a primary drinking water standard for perchlorate be based on good science.

DETAILED REPORT

In early 1997, the California Department of Health Services (CDHS) found the inorganic chemical perchlorate in certain drinking water wells in eastern Sacramento County. As a result of these initial discoveries and improved laboratory analyses, CDHS investigated and found perchlorate in drinking water wells located in several southern California groundwater basins, including some of major significance to our Member Agencies. Metropolitan has detected perchlorate at levels between 5 to 9 parts per billion (ppb) in Colorado River water but not in State Project water. Because perchlorate has not previously been considered a common drinking water contaminant, no federal or state drinking water standards exist. However, CDHS has recently adopted a provisional action level of 18 ppb for perchlorate in drinking water based on potential health effect concerns related to levels that can interfere with the thyroid gland's ability to utilize iodine.

Perchlorate (as ammonium perchlorate) is used in solid rocket propellants, munitions and fireworks, and has been found in drinking water sources in areas where aerospace development and testing has occurred. Several sites in the southern California area have been identified as potential sources of perchlorate contamination, including an Aerojet facility (Azusa), the Azusa

landfill, the Whittaker-Bermite site (Santa Clarita), and the Jet Propulsion Laboratory (La Canada-Flintridge). Investigation by the State of Nevada indicates that perchlorate production facilities in Henderson, Nevada are a source of contamination in Colorado River water. This source is from groundwater flowing into Lake Mead via the Las Vegas Wash.

Currently, health effects information on perchlorate is very limited. A \$1.4 million study by the United States Air Force is scheduled for completion in the Fall of 1998, but its results may not be conclusive. Adequate information on cost-effective treatment technology to remove perchlorate is not yet available but is the subject of extensive research to be conducted over the next few years. Metropolitan is actively involved with water associations on the state and federal level along with our Member Agencies to develop research on treatment technologies and to pursue funding for clean-up and remediation.

Analysis

Perchlorate may become an important issue for the rest of the country as additional occurrence data are obtained and better health effects data are generated. Existing laws and regulations do not specifically address protection of surface water and groundwater drinking water supplies from perchlorate contamination. The Association of California Water Agencies is currently considering amendments to SB 1033 to address these deficiencies in the law.

SB 1033 would require CDHS, on or before July 1, 1999, to adopt a primary drinking water standard for perchlorate found in public water and to prepare and submit a report to the California State Legislature on perchlorate occurrence and treatment. It is important that CDHS base any drinking water standard on sound scientific data. It is not clear if a drinking water standard can be set by July 1, 1999 and be based on sound science.

Based on the existing policy principles pending for adoption by your Board on groundwater and source water quality protection, staff recommends that your Board support SB 1033 if amended to make sure that a standard is not set prior to the development of the sound science needed to set such a standard.

EGD/CEA/MDB/mi

Attachment (SB 1033)

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AMENDED IN SENATE JANUARY 20, 1998

AMENDED IN SENATE JANUARY 6, 1998

SENATE BILL

No. 1033

Introduced by Senator Sher

February 27, 1997

An act to amend Section 116275 of, and to add Section 116611 to, the Health and Safety Code, relating to drinking water.

LEGISLATIVE COUNSEL'S DIGEST

SB 1033, as amended, Sher. Public water systems: public health goals: perchlorate.

Existing law, the Calderon-Sher Safe Drinking Water Act of 1996, requires the State Department of Health Services to submit to the Legislature a Safe Drinking Water Plan for California once every 5 years, and to take all reasonable measures necessary to reduce the risk to the public health from waterborne illnesses in drinking water caused by cryptosporidium and giardia.

Existing law requires the department to adopt primary drinking water standards for contaminants in drinking water that are to be set at levels as close as possible to the corresponding public health goal. Existing law requires the Office of Environmental Health Hazard Assessment to perform a risk assessment and, based upon that risk assessment, to adopt a public health goal for contaminants in drinking water based exclusively on public health considerations.

This bill would define ~~“recommended public health goal”~~ or “public health goal” for these purposes to mean the public health goals established by the office.

Existing law defines a “public water system” to mean a system that provides water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days of the year, except as specified.

This bill would require the department, on or before July 1, 1999, to adopt a primary drinking water standard for perchlorate found in public water systems. In addition, the bill would require the department, on or before July 1, 1999, to prepare and submit a report to the Legislature that summarizes the number of public water systems that have detected perchlorate ~~in quantities that may pose a significant threat to the public health or to the environment and that~~ summarizes the actions that public water systems are taking to reduce the amount of perchlorate contamination.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. Section 116275 of the Health and Safety
- 2 Code is amended to read:
- 3 116275. As used in this chapter:
- 4 (a) “Contaminant” means any physical, chemical,
- 5 biological, or radiological substance or matter in water.
- 6 (b) “Department” means the State Department of
- 7 Health Services.
- 8 (c) “Primary drinking water standards” means:
- 9 (1) Maximum levels of contaminants that, in the
- 10 judgment of the department, may have an adverse effect
- 11 on the health of persons.
- 12 (2) Specific treatment techniques adopted by the
- 13 department in lieu of maximum contaminant levels
- 14 pursuant to subdivision (j) of Section 116365.
- 15 (3) The monitoring and reporting requirements as
- 16 specified in regulations adopted by the department that
- 17 pertain to maximum contaminant levels.

1 (d) "Secondary drinking water standards" means
2 standards that specify maximum contaminant levels that,
3 in the judgment of the department, are necessary to
4 protect the public welfare. Secondary drinking water
5 standards may apply to any contaminant in drinking
6 water that may adversely affect the odor or appearance
7 of the water and may cause a substantial number of
8 persons served by the public water system to discontinue
9 its use, or that may otherwise adversely affect the public
10 welfare. Regulations establishing secondary drinking
11 water standards may vary according to geographic and
12 other circumstances and may apply to any contaminant
13 in drinking water that adversely affects the taste, odor, or
14 appearance of the water when the standards are
15 necessary to assure a supply of pure, wholesome, and
16 potable water.

17 (e) "Human consumption" means the use of water for
18 drinking, bathing or showering, hand washing, or oral
19 hygiene.

20 (f) "Maximum contaminant level" means the
21 maximum permissible level of a contaminant in water.

22 (g) "Person" means an individual, corporation,
23 company, association, partnership, limited liability
24 company, municipality, public utility, or other public
25 body or institution.

26 (h) "Public water system" means a system for the
27 provision of water for human consumption through pipes
28 or other constructed conveyances that has 15 or more
29 service connections or regularly serves at least 25
30 individuals daily at least 60 days out of the year. A public
31 water system includes the following:

32 (1) Any collection, treatment, storage, and
33 distribution facilities under control of the operator of the
34 system which are used primarily in connection with the
35 system.

36 (2) Any collection or pretreatment storage facilities
37 not under the control of the operator that are used
38 primarily in connection with the system.

1 (3) Any water system that treats water on behalf of
2 one or more public water systems for the purpose of
3 rendering it safe for human consumption.

4 (i) "Community water system" means a public water
5 system that serves at least 15 service connections used by
6 yearlong residents or regularly serves at least 25 yearlong
7 residents of the area served by the system.

8 (j) "Noncommunity water system" means a public
9 water system that is not a community water system.

10 (k) "Nontransient noncommunity water system"
11 means a public water system that is not a community
12 water system and that regularly serves at least 25 of the
13 same persons over 6 months per year.

14 (l) "Local health officer" means a local health officer
15 appointed pursuant to Section 101000 or a local
16 comprehensive health agency designated by the board of
17 supervisors pursuant to Section 101275 to carry out the
18 drinking water program.

19 (m) "Significant rise in the bacterial count of water"
20 means a rise in the bacterial count of water that the
21 department determines, by regulation, represents an
22 immediate danger to the health of water users.

23 (n) "State small water system" means a system for the
24 provision of piped water to the public for human
25 consumption that serves at least five, but not more than
26 14, service connections and does not regularly serve
27 drinking water to more than an average of 25 individuals
28 daily for more than 60 days out of the year.

29 (o) "Transient noncommunity water system" means a
30 noncommunity water system that does not regularly
31 serve at least 25 of the same persons over six months per
32 year.

33 (p) "User" means any person using water for domestic
34 purposes. User does not include any person processing,
35 selling, or serving water or operating a public water
36 system.

37 (q) "Waterworks standards" means regulations
38 adopted by the department that take cognizance of the
39 latest available "Standards of Minimum Requirements for
40 Safe Practice in the Production and Delivery of Water for

1 Domestic Use" adopted by the California section of the
2 American Water Works Association.

3 (r) "Local primacy agency" means any local health
4 officer that has applied for and received primacy
5 delegation from the department pursuant to Section
6 116330.

7 (s) "Service connection" means the point of
8 connection between the customer's piping or
9 constructed conveyance, and the water system's meter,
10 service pipe, or constructed conveyance. A connection to
11 a system that delivers water by a constructed conveyance
12 other than a pipe shall not be considered a connection in
13 determining if the system is a public water system if any
14 of the following apply:

15 (1) The water is used exclusively for purposes other
16 than residential uses, consisting of drinking, bathing, and
17 cooking or other similar uses.

18 (2) The department determines that alternative
19 water to achieve the equivalent level of public health
20 protection provided by the applicable primary drinking
21 water regulation is provided for residential or similar uses
22 for drinking and cooking.

23 (3) The department determines that the water
24 provided for residential or similar uses for drinking,
25 cooking, and bathing is centrally treated or treated at the
26 point of entry by the provider, a passthrough entity, or
27 the user to achieve the equivalent level of protection
28 provided by the applicable primary drinking water
29 regulations.

30 (t) "Resident" means a person who physically
31 occupies, whether by ownership, rental, lease or other
32 means, the same dwelling for at least 60 days of the year.

33 ~~(u) "Recommended public health goal" or "public~~

34 (u) "Public health goal" means a goal established by
35 the Office of Environmental Health Hazard Assessment
36 pursuant to subdivision (c) of Section 116365.

37 SEC. 2. Section 116611 is added to the Health and
38 Safety Code, to read:

39 116611. (a) On or before July 1, 1999, the department
40 shall adopt a primary drinking water standard for

1 perchlorate found in public water systems in California in
2 a manner ~~which is~~ consistent with this chapter.

3 (b) Notwithstanding Section 7550.5 of the
4 Government Code, on or before July 1, 1999, the
5 department shall prepare and submit a report to the
6 Legislature that summarizes the number of public water
7 systems that have detected perchlorate ~~in quantities that~~
8 ~~may pose a significant threat to the public health or to the~~
9 ~~environment and that summarizes the actions that public~~
10 ~~and the actions that~~ public water systems are taking to
11 reduce the amount of perchlorate contamination found
12 in drinking water. The report shall also ~~identify~~ *specify*
13 those actions or treatment techniques that public water
14 systems may undertake to prevent, reduce, or eliminate
15 the occurrence of perchlorate in public water systems.